REMARKS

The correction made to SEQ ID NO. 2 is obvious in view of Examples 1 and 3 of the present application, which describes the actual amino acid sequences of the peptides that were used for generating the subject antibodies; see Example 1 at page 35, line 6 and Example 3 at page 39, line 3 of the application as filed. It is therefore submitted that it is immediately evident to the person skilled in the art that nothing else would have been intended than what is offered as the correction.

The amendments to claims in no way alter their scope. Support for the amendments is found throughout the application and in the claims as originally filed. It is respectfully submitted that the invention as claimed fully meets all requirements and that the claims are worthy of allowance. Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicant encourages the Examiner to call the undersigned collect at (608) 218-6900.

Dated: June 5, 2006

J. Mitchell Jones
Registration No. 44,174

MEDLEN & CARROLL, LLP
101 Howard Street, Suite 350
San Francisco, California 94105
Phone: (608) 218-6900

In a preferred embodiment of the present invention, the antibodies recognize an epitope that comprises or consists of the amino acid sequence NLLGRFEL (SEQ ID NO: 1) or TKDNNLLGRFELSG (SEQ ID NO: 2). The peptides of SEQ ID NO: 1 and 2 were shown to be presented on the extracellular side of the plasma membrane when Hsp70 is localized on the cell surface and inhibit the binding of antibodies according to the invention in a dose dependent manner. Most preferably, said antibodies are monoclonal antibodies. In particular, the antibody or the antigen-binding fragment thereof of the present invention preferably exhibit the immunological binding characteristics of monoclonal antibody cmHsp70.1 as produced by hybridoma cmHsp70.1, deposited with the DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH, Mascheroder Weg 1b, D-38124 Braunschweig, Germany on November 14, 2003, and assigned Accession Number DSM ACC2629, or of cmHsp70.2 as produced by the hybridoma cmHsp70.2, deposited with the DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH on November 14, 2003, and assigned Accession Number DSM ACC2630. The immunological binding characteristics of monoclonal antibody cmHsp70.1 are substantially the same as those of antibody RPN1197 described inter alia in international patent application WO02/22656; see particularly the examples, the disclosure of which is incorporated herein by reference. However, while international application WO02/22656 as well as other publications by the inventors, e.g., Botzler et al., Cell Stress & Chaperones 3 (1998), 6-11, describe the desired immunological characteristics of an antibody of the present invention, especially that the antibodies are capable of binding to viable Hsp70-expressing (CX+) tumor cells and preferably also substantially inhibit the lysis of CX + cells, the present invention for the first time enables the unlimited provision of such antibodies and reliable sources, in particular corresponding hyprodoma cell lines. Hence, the provision of the hybridomas producing monoclonal antibodies cmHsp70.1 and cmHsp70.2, respectively, enables the person skilled in the art to design and produce functionally equivalent antibodies, for example by adapting the antigen-binding site of either of the mentioned antibodies.

Each of the two antibodies specifically provided is unique with respect to its respective immunological and biological activities. Both may be distinguished from other anti-Hsp70 antibodies by their ability to bind to extracellular epitopes of Hsp70, in particular on intact and viable tumor cells. They are also capable of exhibiting an inhibitory effect on the cytolytic activity of NK cells against Hsp70 expressing tumor cells; see Figure 1. Hence,